

3. EMPLOYER'S REQUIREMENT

Terms of Reference for Consultancy Service for the Design approval stages of International Cricket Stadium at Hulhumale', Maldives

1.0 Introduction

Hulhumalé is the first fully reclaimed, pre-planned city of the country located within 3 kilometers from Malé, the capital city. Curving a welcoming path for its development in early 2015 Hulhumalé Phase II was reclaimed with the additional 244 hectares. The newly reclaimed addition to the existing conurbation promises diverse development opportunities. Hulhumalé Phase I currently houses 57,000 people with the target population of 93,000 people. With the new developments, Phase II plans a populous of 117,000 people.

The Cricket Control Board of Maldives (CCBM) was established on 1 January 1983 by the government to promote and develop the game of cricket in the Maldives. The Maldives became a member of the Asian Cricket Council in 1996, and an affiliate member of the International Cricket Council in 1998.

The national cricket team began representing Maldives in the Twenty20 early in 2019, when ICC made the decision to grant the country with full Twenty20 International (T20I) status, for the purpose of promoting the game in the island nation.

This coincides with the aims of the Government to promote the game and develop a 20,000 seating capacity, world-class cricket stadium that can be used both locally and to host international T-20 cricketing events in Hulhumale'.

2.0 Project Overview

Working towards achieving the Government's aims to developing a 20,000 seating capacity, world-class cricket stadium, a Detail Project Report (DPR) including conceptual programming, master planning and architectural guidelines in accordance with ICC standards has been developed.

The new stadium shall be comparable in all respects with international standard professional contemporary sports stadia recently constructed or under construction, and meet with the requirements of all applicable National Building Codes and Standards as well as the United Kingdom's Guide to Safety of Sports Grounds (The Green guide) as published by HMSO.

The stadium is to be designed as a multi-use stadium capable of hosting National & International T-20 Cricket as well as major concerts, events and ceremonies. The stadium shall meet the requirements of the Governing Bodies of ICC & BCCI to allow national and international events to be staged in the stadium

2.1 PROJECT OBJECTIVE

The stated objectives and goals of the stadium are:

1. To develop a stadium with 20,000 seats for a range of uses including, but not limited to: Cricket, concerts and other entertainment events.
2. In addition to the standard codes, the stadium shall meet the requirements of the following codes:
 - a. ICC Guidelines for cricket stadium
 - b. BCCI Guidelines for cricket stadium
 - c. Relevant safety guidelines as prescribed by the Government of Republic of Maldives.
3. To provide a highly cost effective low maintenance facility.
 - a. To complement a sports and entertainment precinct that can be used seven days a week by ensuring the stadium integrates with, and makes use of, adjacent civic spaces and commercial and community facilities.
4. Strengthen the national infrastructure capacity in tourism and hospitality business by allowing the nation to be able to host international cricket tournaments and events frequently, i.e. IPL or Asia Cup.
5. To act as a catalyst for complementary development in the surrounding area.
6. To provide a facility that will achieve a 50-year life.
7. To provide a facility that can be utilized all year for a number of events, in order to maximize opportunity for revenue generation and sustainability.
8. To provide an "Iconic" stadium facility that reflects the growth of sports in Maldives and is a showcase for sports and the state both nationally and internationally.
9. To provide a facility that will allow Maldives to effectively compete for international sports events against comparable facilities in Asia.
10. To provide a sustainable development that will enhance public utilization of facility and ancillary structures.
11. That will control and mitigate effects on local communities surrounding the stadium.
12. Roof coverage for 60% of the seats.

13. The seating bowl shall be provided to maximize the atmosphere and locate patrons as close as possible to the field of play.
14. The seating bowl shall be column free and allow excellent viewing conditions for sports and events held in the stadium.

In addition to the stated Objectives, the complex should also achieve the following goals:

1. To create a multi-use, 20,000 seat stadium that maximizes atmosphere and intimacy and will enhance the event experience for spectators for all sports.
2. To create a stadium that is internationally recognized as a world-class venue for the showcasing of professional sport and entertainment.
3. Sufficient infrastructure to allow for safe entry and egress for the site.
4. To provide a design that adheres to the principles of Environmental Sustainable Design with a minimal ecological footprint.

To provide an iconic design solution that represents the unique environment of Maldives along with the aspirations of the community, which it serves

2.2 LOCATION

The stadium will be constructed in Phase 2 of Hulhumale' & total site area is 21 Acres.

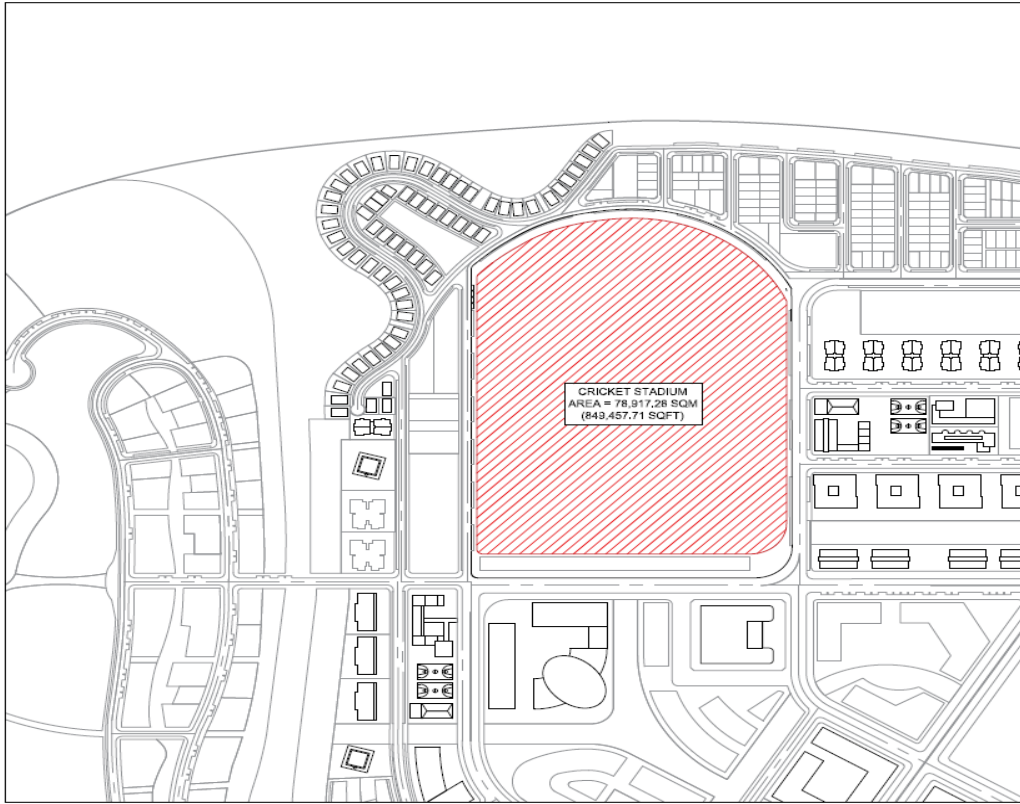


Figure 1 Location plan (NTS)

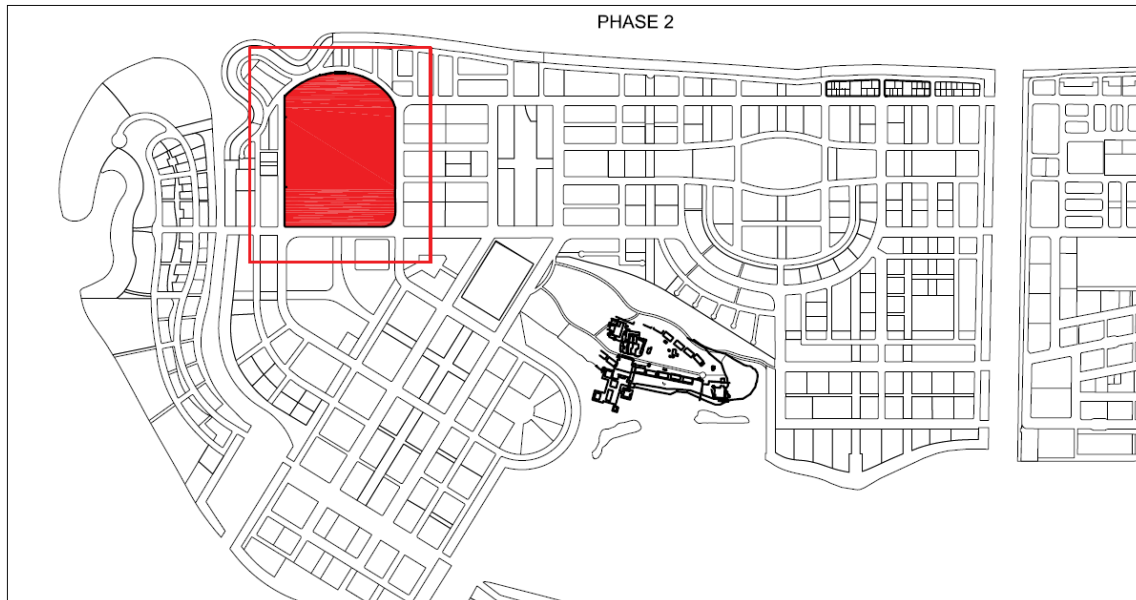


Figure 2 Site plan (NTS)

2.3 COMPONENTS OF THE PROJECT

Details are as below.

1. Cricket Stadium (ICC complaint)
 - a. Field of play
 - b. 20,000 capacity seating
 - c. Players facilities
 - d. Training facilities
 - e. Media facilities
 - f. Club & VIP lounge
 - g. Presidential suite
 - h. Corporate boxes (11 Nos)
 - i. Public Toilets
 - j. Concession stands
 - k. First aid facilities
 - l. Administration
 - m. Security
2. Stadium Club
 - a. Entrance lounge
 - b. Cafe
 - c. Fitness Centre
 - d. Indoor swimming pool
 - e. Restaurants
 - f. Multipurpose hall
 - g. Locker facilities
 - h. Administration
 - i. Dedicated parking
 - j. Fully accessible
3. Cricket Academy
 - a. 10 indoor pitches
 - b. Dormitory for students
 - c. Suite rooms for coaches
 - d. Dining facilities
 - e. Recreation
4. Public Amenities
 - a. Retail stores- future expansion
 - b. Public gardens
 - c. Cricket hall of fame

2.4 PROJECT ORGANIZATIONAL STRUCTURE

The organizational structure of this projects if shown in the figure 1. The design consultant will be working with the Planning & development unit to review & approve the drawings, material specifications, structural specifications & technical specification submitted by the contractor (the scope of the consultant is further detailed in [3.0 Scope of work](#) of this document.)

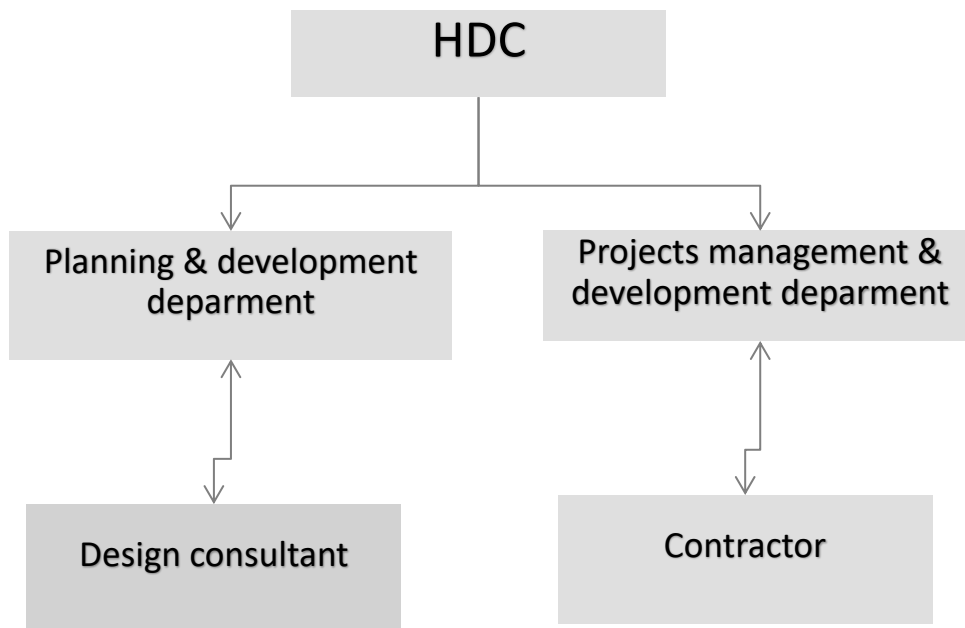


Figure 3 – Project organizational structure

3.0 SCOPE OF WORK

The services of a qualified and experienced established professional firm of consulting architects and engineers (Project Design and Supervision Consultant) is required to provide professional input, advice and support to the design & implementation (when required) of the activities carried out by the construction agency/contractor(s) as “HDC’s Representative” under the respective contract(s).

Drawing Approval Stage (approval of detail design, technical design & shop drawings):

During this stage, the consultant would ensure the following things.

1. Ensure that all aspects of the project are in accordance with the DPR
2. Ensure that in addition to the standard codes, the stadium shall meet the requirements of the following codes:
 - ICC Guidelines for cricket stadium
 - BCCI Guidelines for cricket stadium
 - Relevant safety guidelines as prescribed by the Government of Republic of Maldives.
3. Ensure the total compliance of material specifications, technical specifications and various other requirements contained in the respective contracts by the Construction Agency/Contractor(s).
4. Ensure that all mechanical systems, technical specifications, material specifications and various other requirements of MEP services are in accordance with the DPR.
 - Heat Ventilation Air-conditioning System
 - Electrical System
 - Low Voltage, Fire Alarm, Public Address
 - Public Health Engineering System
 - Hydro pneumatic system
 - Water treatment plant
 - Drainage system
 - Sewage treatment plant
 - Rain water harvesting
 - Storm water drainage
 - Fire Fighting System
 - Lift/Elevator System
 - Building Management Systems
 - Communication & CCTV systems
5. Ensure that all aspects of the project are in accordance to the BREEAM standards & that at least a BREEAM GOOD score is achieved for this project.

Drawing implementation stage:

The consultant is required to ensure the design, durability & technical specifications of the following aspects of the stadium are as per the requirements of the relevant codes & approved drawings.

1. Prefab structural members
2. External glazed façade & façade screens
3. Hybrid turf systems
 - a. Turf protection system
 - b. Temporary drivable roadway
 - c. Sub surface drainage & vacuum powered system
4. Modular seating gallery - steel grandstand
5. Roof structure – tensile roofing
6. Flood lighting
7. Pool tank main structure & drainage system
8. MEP services systems

If there are any design changes or modifications during project Implementation Stage, the consultant is required to ensure that the revision is in keeping with the scope of the project and provide recommendations for HDC's consideration as per the change. Consultant must also ensure that the revision is applied to all other aspects of the project wherever necessary & that the amendments are made accordingly.

4.0 SCOPE OF SERVICES

The Consultant's main responsibility is to ensure execution of work with due control for design, ICC Compliance, quality control, cost control and project progress monitoring. The Services to be performed by the Consultant shall include

- a. Review the DPR, Drawings, Design and all other documents of the project produced by the EPC Contractor and ensure compliance to all applicable codes and guidelines.
- b. Proof checking of designs, calculations and working drawings for the construction of various components of the Project Facility in accordance with provisions of the DPR.
- c. Review the proposed environmental management plan for the Project during Implementation

Period and Operations Period & give recommendations (if any).

- d. Review for the proposed quality assurance and quality control procedures during the Implementation Period and Operations Period, and submit their comments/recommendation for consideration of HDC
- e. The Consultant shall review for minor changes in design; alignment and layout requested by the Construction Agency/Contractor(s), and submit their comments/recommendation for consideration of HDC
- f. The Consultant shall review for major changes requested by the Construction Agency/Contractor(s) in design, alignment and layout and submit their comments/recommendation for consideration of HDC
- g. The Consultant shall ensure quality control of MEP systems (as mentioned in 3.0 Scope of work of this document) in accordance with tender stipulations, DPR, specifications, drawing and site conditions. The quality control will be exercised at all stages of construction, viz. Approval of materials thereof in proper proportion including prescribing norms for test periodically and acceptability criteria and workmanship at all stages of execution of individual terms of work.
- h. The consultant shall give recommendations to HDC regarding modifications, if any, due to site conditions and advising regarding cost variation, on account of extra items and excesses on the contract.
- i. The consultant shall review the Design and details drawings, MEP systems and the procedure submitted by the contractor to ensure that they are in accordance to the BREEAM standards to achieve a BREEAM GOOD score . Consultant to submit their recommendations for HDC's consideration.
- j. Upon signing the agreement consultant has to submit the work plan for clients (HDC) approval. If any changes are required the consultant is obliged to bring the changes upon approval from client.

5.0 TEAM COMPOSITION & QUALIFICATION REQUIREMENTS

The Consultancy Team (the "Consultancy Team") shall consist of the following key personnel (the "Key Personnel") who shall discharge their respective responsibilities as specified below:

Key Personnel	Responsibility
Team Leader	They will lead, co-ordinate and supervise the multi-disciplinary team for undertaking the services as specified in the ToR. They will also review the Project development plan prepared by the Contractor and check its adherence to the requirements of the Agreement. In addition, they will be responsible for periodic review of the construction as per the provisions of the Agreement. Team leader will be assisted by the below mentioned team members.
Architecture & Technical Design Expert	They will be responsible for checking and approving all the design related details at DPR stage and supervision of the Contractor's works from the design & technical perspectives.
Civil Engineer	They will be responsible for checking and approving all the structural details as given in the DPR and in the detail design drawings, technical design drawings & shop drawings when submitted by the contractor. They will be responsible for periodic review of the construction.
MEP Engineer	They will be responsible for ensuring building services & systems design as well as methodology of implementation to fit local & international standards.

The consultancy firm and all members of the team should have a minimum of 10 years' experience & must have worked on at least 5 projects of similar scope.

Key Personnel	Qualification
Team Leader	B. Architecture / MSc. Architecture / Tech. civil engineering
Architecture & Technical Design Expert	B. Architecture
Civil Engineer	B. Tech Civil engineering
MEP Engineer	B. Tech Electrical / Mechanical engineering

The Consultant must ensure that the required, professional, technical and administrative inputs, required to deliver on the project are considered, costed and made available to the project as necessary. These must be translated into the Technical and Financial submissions made by the Consultant.

The Consultant shall provide sufficient evidence and detail of qualifications, certification, experience and availability for and of personnel, which must be available for the required time to allow the Consultant to deliver on the requirements of the Formulation and Supervision aspects of the contract(s).

At the start of the assignment(s) i.e. Formulation and Supervision, the Consultant must provide confirmation of availability of the personnel proposed at the time of bid. Where personnel are no longer available, the Consultant must provide similar evidence to assure that replacement personnel are of similar or exceed the qualifications and experience of the previously submitted.

HDC reserves the right to accept or reject based on changes to the Consultant personnel.

6.0 DURATION

The project design & implementation period has an estimated duration of eighteen (18) months.

The services of the consultant will be required during the following stages of the project.

- Drawing approval stage (approval of preliminary design and detail design, technical design)
- In this duration, the contractor will first submit preliminary designs for Architectural, structural and services drawings. After the contractor receives approval for preliminary drawings, the contractor will submit the detail drawings for Architectural, structural and services drawings. The consultant needs to review both preliminary drawings and details drawings. The review period for architectural and structural drawings will be 14 days. The review period for services drawings will be 21 days.
 - Implementation stage
 - Structural works (pre fab structures)
 - External glazed façade & façade screens
 - Hybrid turf systems
 - Turf protection system
 - Temporary drivable roadway
 - Sub surface drainage & vacuum powered system
 - Modular seating gallery - steel grandstand
 - Roof structure – tensile roofing
 - Flood lighting
 - Pool tank main structure & drainage system
 - Testing & commissioning of all MEP structures as mentioned in 3.0 Scope of works
 - Approval of shop drawings

The consultant team must report to HDC in person once every 3 months, for a maximum duration of 3 days, during the design & implementation period of this project. This is to ensure that all aspects of the projects are running smoothly.

7.0 HDC INPUTS

HDC will provide the consultant with the following

- Electronic copies of existing Detail Project Report (DPR), Design Drawings and BoQ
- Consultant contract
- Contractors' Contract Documents.
- Details on Site location
- Return air fare (maximum of 6 trips) – if additional trips are required, it will be charged at a rate discussed and agreed upon by the consultant and HDC.
- Accommodation
- Consultant's Working Space

8.0 PAYMENT TERMS

Payment will be made according to the Payment Schedule as below:

#	Deliverable	Percentage of Payment
a.	Stage 1: Drawing approval Approval of detail design, technical design & shop drawings	25% of the contract value will be paid upon completion of preliminary design
		25% of the contract value will be paid upon completion of Detail design
b.	Stage 2: Project implementation - Structural works (pre fab structures) - Testing & commissioning of all MEP structures as mentioned in 'Employers Requirement' Clause 3.0 Scope of works	20% will be distributed in equal payments throughout the contract period and will be paid on monthly basis
		30% will be paid upon completion of the project; construction period.
TOTAL		100%